

ECHO



www.bearcatproducts.com

DEBRIS LOADER

DL12653 - 12 INCH 653cc SUBARU

DL12720 - 12 INCH 720cc SUBARU

PARTS MANUAL



PN: 77097-00
Rev. 010111
Companion to 77096-00
SN Range: B00001 - Current

Before You Begin

DEAR ECHO BEAR CAT CUSTOMER

Thank you for purchasing a ECHO Bear Cat product. The ECHO Bear Cat line is designed, tested, and manufactured to give years of dependable performance. To keep your machine operating at peak efficiency, it is necessary to adjust it correctly and make regular inspections. The following pages will assist you in the operation and maintenance of your machine. Please read and understand this manual before operating your machine.

If you have any questions or comments about this manual, please call us toll-free at 1-800-247-7335.

If you have any questions or problems with your machine, please call or write your local authorized ECHO Bear Cat Dealer.

This document is based on information available at the time of its publication. ECHO Bear Cat is continually making improvements and developing new equipment. In doing so, we reserve the right to make changes or add improvements to our product without obligation for equipment previously sold.

PLEASE SEND US YOUR WARRANTY CARD

A warranty card is included in your owner's kit packaged with your machine. Please take the time to fill in the information requested on the card. When you send your completed card to us, we will register your machine and start your coverage under our limited warranty.

FOR MACHINE SERVICE OR PARTS:

For service assistance, contact your nearest authorized ECHO Bear Cat dealer or the factory. For parts, contact your authorized dealer. The parts manual for your machine is available at http://bearcatproducts.com/main/support/index_html. Your dealer will need to know the serial number of your machine to provide the most efficient service. See below for information on how to identify and record the serial number for your machine.

FOR ENGINE SERVICE OR PARTS:

For engine service or parts, contact your nearest authorized engine dealer. ECHO Bear Cat does not handle any parts, repairs or warranties for engines.

ORDERING PARTS

Only genuine ECHO Bear Cat replacement parts should be used to repair the machine. Replacement parts manufactured by others could present safety hazards, even though they may fit on this machine. Replacement parts are available from your ECHO Bear Cat dealer.

Provide the following when ordering parts:

- The SERIAL NUMBER OR VIN of your machine.
 - The PART NUMBER of the part.
 - The PART DESCRIPTION.
 - The QUANTITY needed.
-

IDENTIFICATION NUMBER LOCATION

Your machine will have either a serial number or vehicle identification number (VIN). VINs are located on the left side of the trailer frame near the hitch. They are 17-digit numbers of the format: 5VJAA001XXWXXXXXX. Serial numbers are located on the machine body. They are 6-digit numbers.

Record your identification number in the space provided and on the warranty registration card.

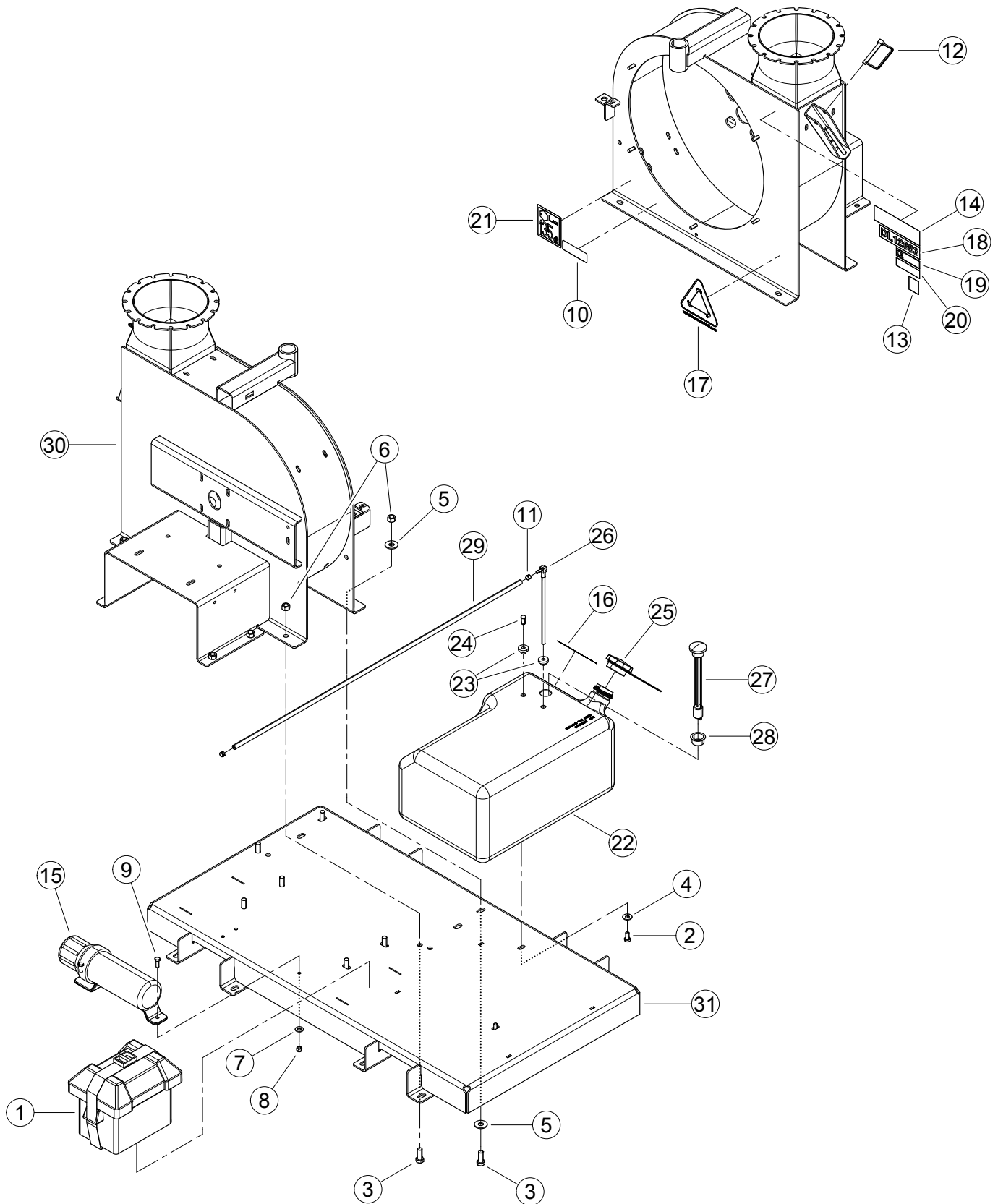
SERIAL NUMBER OR VIN

HOW TO CONTACT ECHO BEAR CAT

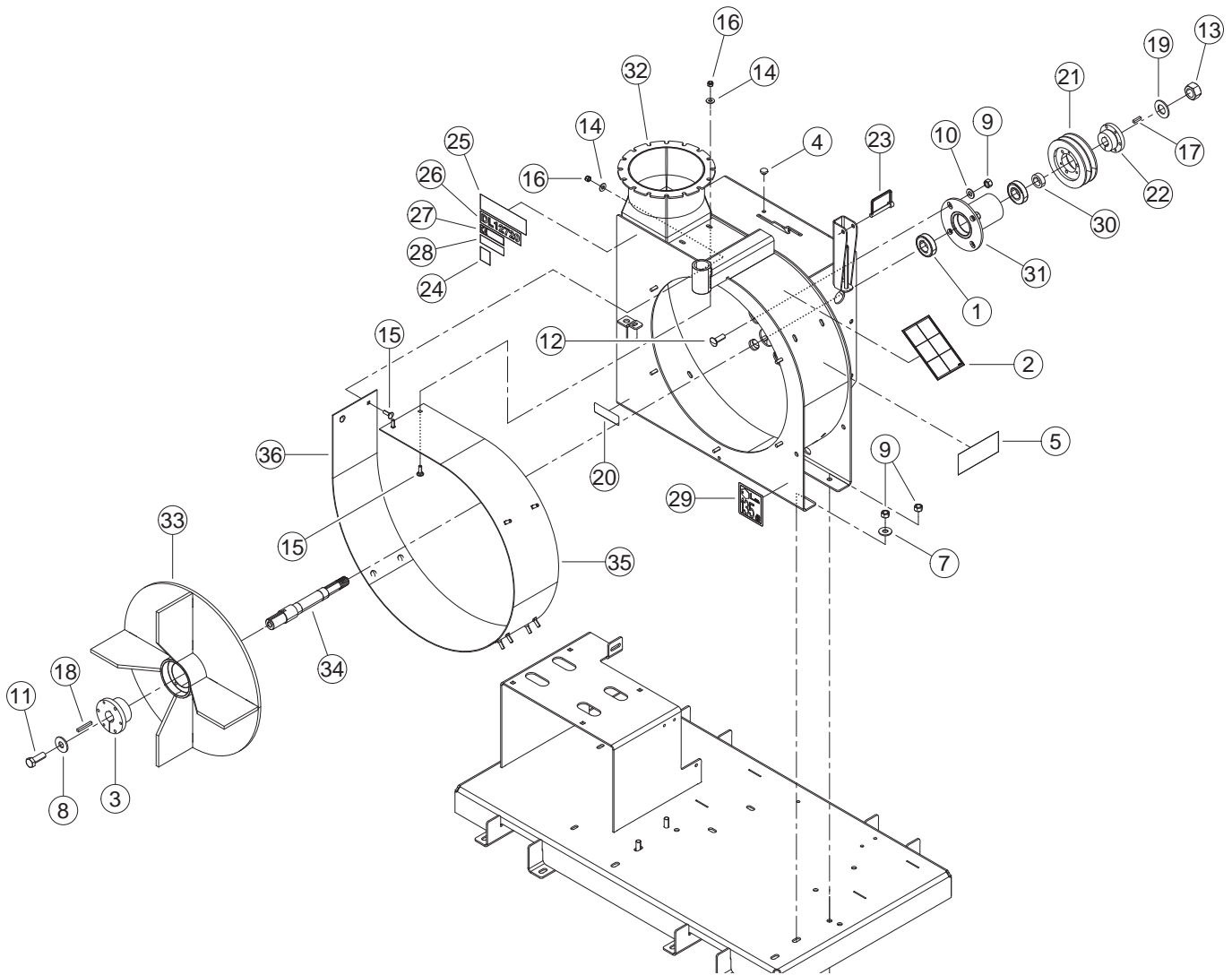
ADDRESS	PHONE	E-MAIL	HOURS
237 NW 12th Street P.O. Box 849 West Fargo, ND 58078	800.247.7335 701.282.5520 FAX: 701.282.9522	sales@bearcatproducts.com service@bearcatproducts.com	Monday - Friday, 8 am to 5 pm Central Time

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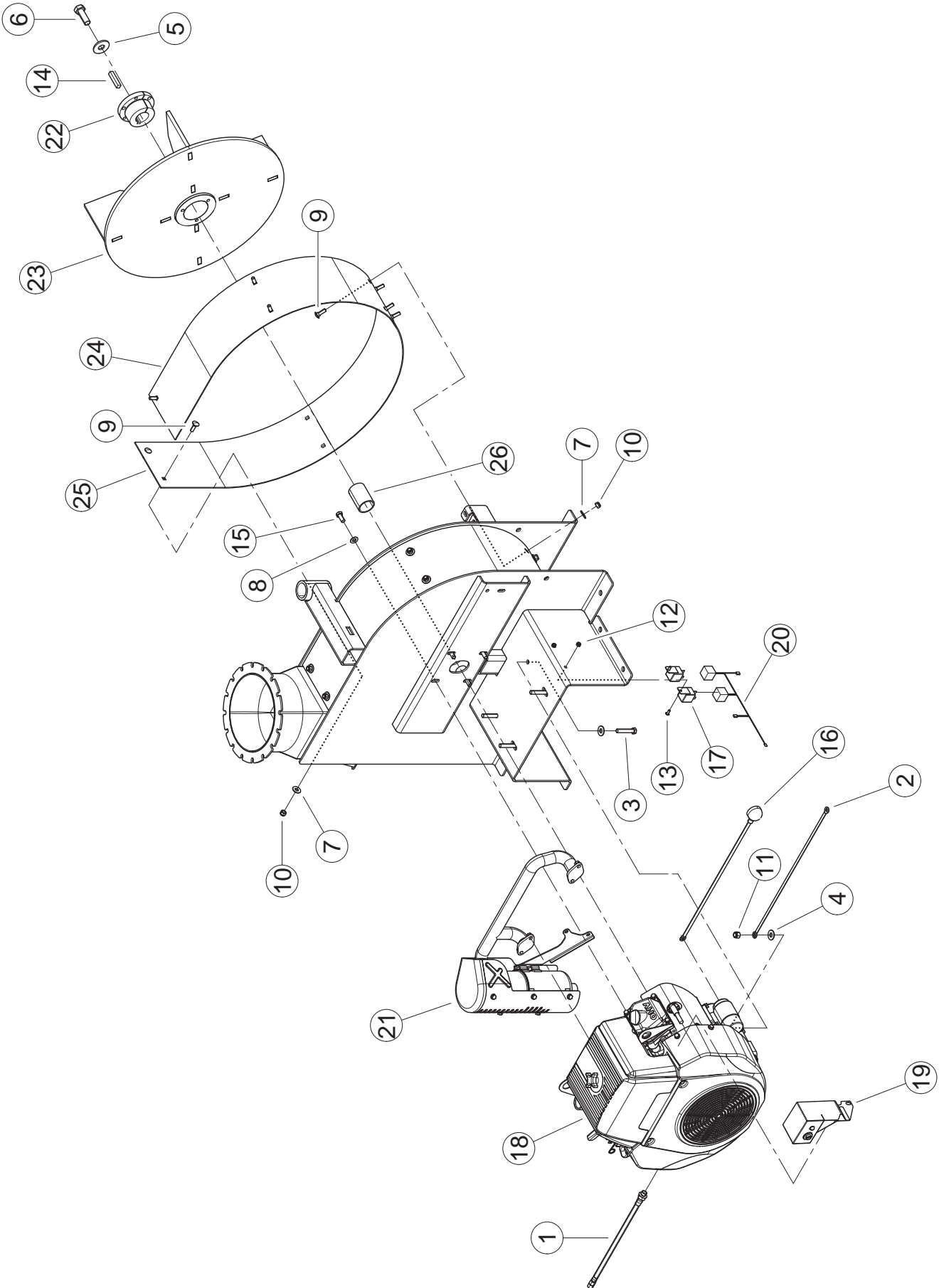
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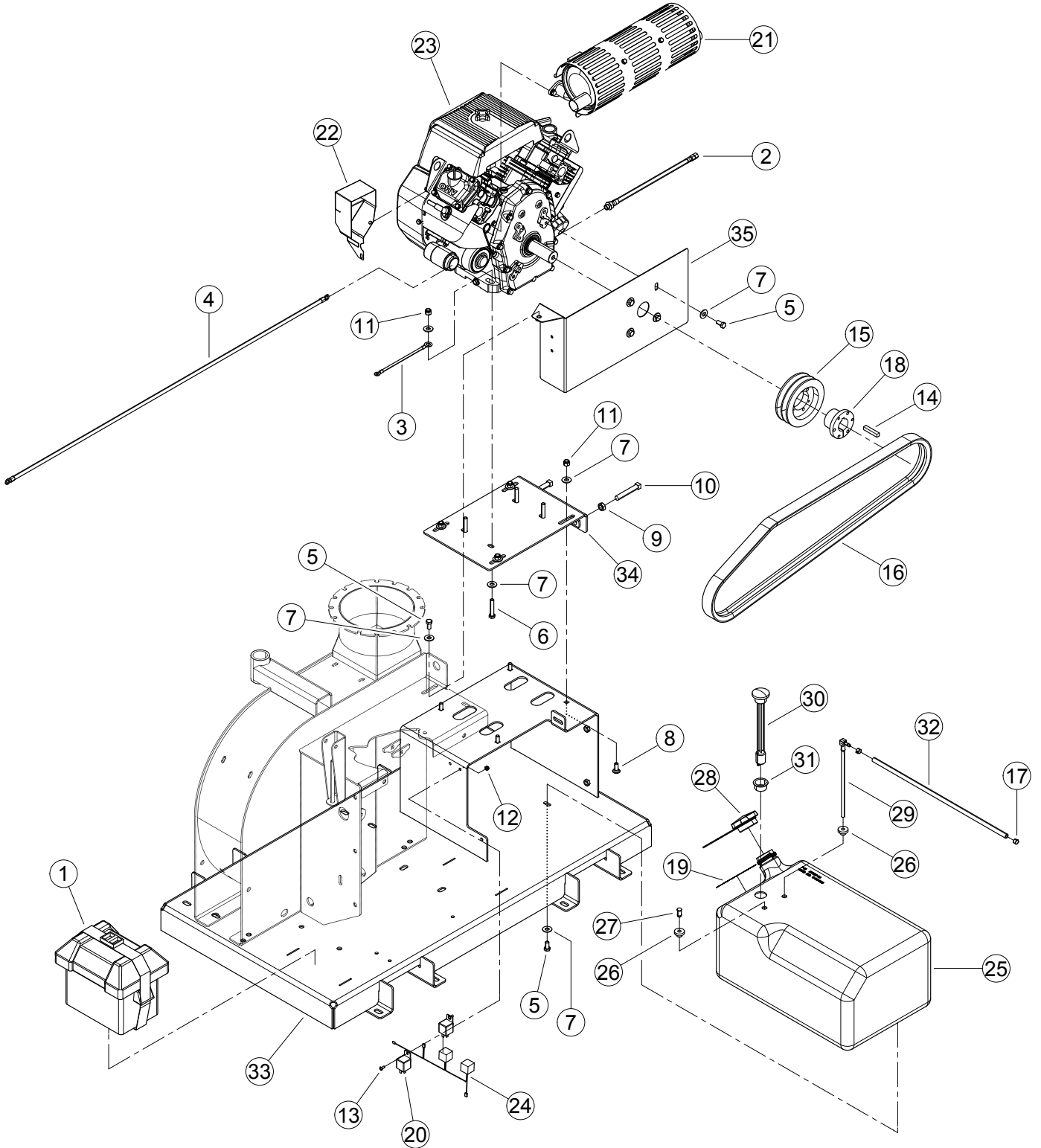
ITEM	PART NUMBER	DESCRIPTION
1	12839	BOX, SMALL BATTERY
2	15005	BOLT, 3/8 X 3/4 HEX HD GR5 ZP
3	15013	BOLT, 1/2 X 1-1/4 GR5 HEX HD NC ZP
4	15031	WASHER, 3/8 FLAT ZP
5	15034	WASHER, 1/2 FLAT ZP
6	15049	NUT, 1/2 CENTERLOCK GRB ZP
7	15250	WASHER, 5/16 FLAT ZP
8	15356	NUT, 5/16 NE NYLOCK ZP
9	15396	BOLT, 5/16 X 7/8 HEX HD GR5 NC ZP
10	16155	DECAL, SERIAL NUMBER
11	16378	CLAMP, 15/32 SPRING
12	16808	PIN, 3/8 X 2-3/4 SNAP
13	17838	DECAL, MADE IN USA
14	17913	DECAL, ECHO BEARCAT 6.82 X 1.90
15	18008-00	CONTAINER, MANUAL
16	18982-00	DECAL, UNLEADED GASOLINE
17	31390-00	DECAL, COLLECT IT
18	31665-00	DECAL, MODEL DL12653
19	31667-00	DECAL, DL12653 INFORMATION
20	31890-00	DECAL, ATLANTIC BRIDGE LTD INFO
21	36506-00	DECAL, 135 DB
22	36522-00	TANK, 9.25 GAL ROTOMOLDED FUEL
23	36689-00	GROMMET, TANK FITTING
24	36690-00	PLUG, TANK VENT
25	36693-00	CAP, FUEL TANK VENTED
26	36694-00	FITTING, TANK FUEL PICK-UP TUBE
27	36695-00	GAUGE, FUEL LEVEL KELCH 100
28	36696-00	GROMMET, KELCH 100 GAUGE
29	75057-00	HOSE, 43 IN. FUEL LINE
30	77034-35	WELDMENT, FAN HOUSING
31	77068-12	WELDMENT, BASE DL12653



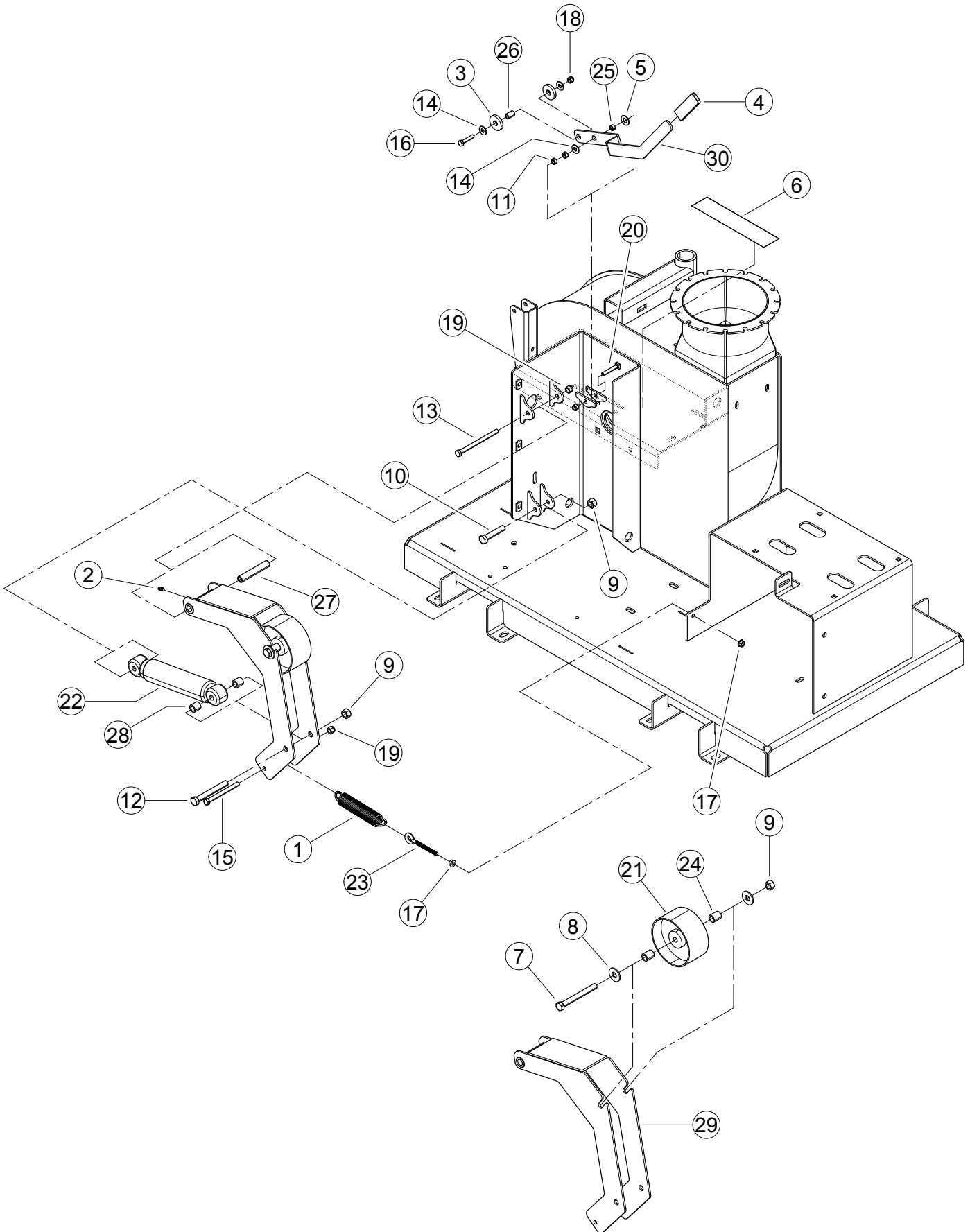
ITEM	PART NUMBER	DESCRIPTION
1	10218	BEARING, 30MM
2	12173	DECAL, DISCHARGE ISO
3	12437	BUSHING, SK 1-1/4"
4	13904-00	BUMPER, RUBBER
5	14942-00	DECAL, MUTILINGUAL MANUAL
6	15013	BOLT, 1/2 X 1-1/4 HEX HD GR5 NC ZP
7	15034	WASHER, 1/2 FLAT ZP
8	15035	WASHER, 5/8 FLAT ZP
9	15049	NUT, 1/2 CENTERLOCK GRB ZP
10	15097	WASHER, 1/2 SAE FLAT ZP
11	15151	BOLT, 5/8 X 1-3/4 HEX HD GR5 NF ZP
12	15157	BOLT, 1/2 X 1-1/2 CRG GR5 ZP
13	15244	NUT, 1" CENTERLOCK NC ZP
14	15250	WASHER, 5/16 FLAT ZP
15	15301	BOLT, 5/16 X 1 CRG GR5 ZP
16	15356	NUT, 5/16 NE NYLOCK ZP
17	15365	KEY, 1/4 SQUARE X 1 LONG
18	15391	KEY, 1/4 SQUARE X 2 LONG PLAIN
19	15425	WASHER, 1" SAE FLAT ZP
20	16155	DECAL, SERIAL NUMBER
21	16326	SHEAVE, 2B5.2 SDS
22	16458	BUSHING, SDS 1"
23	16808	PIN, 3/8 X 2-3/4 SNAP
24	17838	DECAL, MADE IN USA
25	17913	DECAL, ECHO BEARCAT 6.82 X 1.90
26	31470-00	DECAL, MODEL DL12720
27	31666-00	DECAL, DL12720 INFORMATION
28	31890-00	DECAL, ATLANTIC BRIDGE LTD INFO
29	36506-00	DECAL, 135 DB
30	72819	SPACER, 1-1/2 X 1/2
31	7504	BEARING HUB (MACHINED)
32	77050-35	WELDMENT, FAN HOUSING
33	77055-00	WELDMENT, FAN
34	77063-00	SHAFT, VACUUM FAN
35	77069-00	WRAP, HOUSING FAN
36	77070-00	WRAP, HOUSING FAN



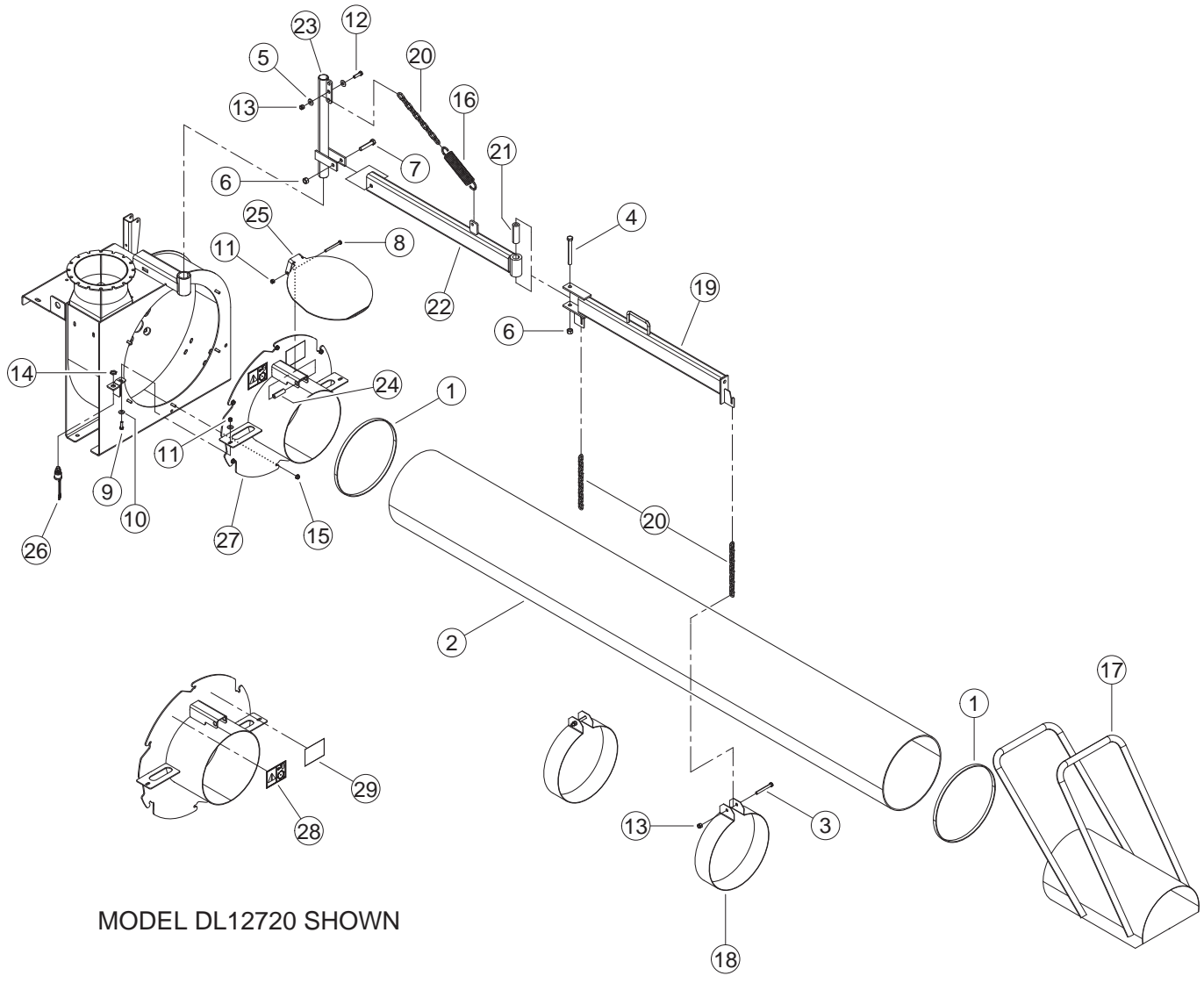
ITEM	PART NUMBER	DESCRIPTION
1	14373-00	HOSE ASSY, CRANKCASE DRAIN
2	14901-00	CABLE, 24" NEG (R / R)
3	15008	BOLT, 3/8 X 2 HEX HD GR5 ZP
4	15031	WASHER, 3/8 FLAT ZP
5	15035	WASHER, 5/8 FLAT ZP
6	15151	BOLT, 5/8 X 1-3/4 HEX HD GR5 NF ZP
7	15250	WASHER, 5/16 FLAT ZP
8	15260	WASHER, 3/8 SAE FLAT ZP
9	15301	BOLT, 5/16 X 1 CRG GR5 ZP
10	15356	NUT, 5/16 NE NYLOCK ZP
11	15388	NUT, 3/8 NE NYLOCK ZP
12	15397	NUT, 10/24 NYLOCK TYPE NM, ZP
13	15423	SCREW, 10-24 X 1/2 MCH PAN HD,PH ZP
14	15440	KEY, 3/8 SQUARE X 2 LONG PLAIN
15	15620	BOLT, 3/8-16 X 7/8 HEX HD GR5
16	17888	CABLE, 33" POS (R / R WITH BOOT)
17	31238-00	RELAY, 12V SPDT W/ FLANGE
18		ENGINE, SUBARU 653CC EH65 (FOR SERVICE SEE OWNER'S MANUAL OR YOUR NEAREST SUBARU INDUSTRIAL ENGINE DEALER)
19		CONTROL, SUBARU V-TWIN IGNITION (FOR SERVICE SEE OWNER'S MANUAL OR YOUR NEAREST SUBARU INDUSTRIAL ENGINE DEALER)
20	31610-00	HARNESS, CARB SAFETY RELEAY
21		MUFFLER, SUBARU V-TWIN OIL SIDE (FOR SERVICE SEE OWNER'S MANUAL OR YOUR NEAREST SUBARU INDUSTRIAL ENGINE DEALER)
22	36118-00	BUSHING, 1-7/16 SK
23	77055-00	WELDMENT, FAN
24	77069-00	WRAP, HOUSING FAN
25	77070-00	WRAP, HOUSING FAN
26	77169-00	SPACER, 2.38" LONG



ITEM	PART NUMBER	DESCRIPTION
1	12839	BOX, SMALL BATTERY
2	14373-00	HOSE ASSY, CRANKCASE DRAIN
3	14629-00	CABLE, 50" NEG (R / R)
4	14985-00	CABLE, 48" POS <R/R>
5	15005	BOLT, 3/8 X 3/4 HEX HD GR5 ZP
6	15008	BOLT, 3/8 X 2 HEX HD GR5 ZP
7	15031	WASHER, 3/8 FLAT ZP
8	15057	BOLT, 3/8 X 1 CRG GR5 NC ZP
9	15089	NUT, 1/2 NC ZP JAM
10	15285	SETSCREW, 1/2 X 3 SQ HD 1/2 DOG PT
11	15388	NUT, 3/8 NE NYLOCK ZP
12	15397	NUT, 10/24 NYLOCK TYPE NM, ZP
13	15423	SCREW, 10-24 X 1/2 MCH PAN HD,PH ZP
14	15440	KEY, 3/8 SQUARE X 2 LONG PLAIN
15	16326	SHEAVE, 2B5.2 SDS
16	16347	BELT, 2B70 BANDED ARAMID
17	16378	CLAMP, 15/32 SPRING
18	16552	BUSHING, SD 1-7/16"
19	18982-00	DECAL, UNLEADED GASOLINE
20	31238-00	RELAY, 12V SPDT W/ FLANGE
21		MUFFLER, SUBARU V-TWIN (FOR SERVICE SEE OWNER'S MANUAL OR YOUR NEAREST SUBARU INDUSTRIAL ENGINE DEALER)
22		CONTROL, SUBARU V-TWIN IGNITION (FOR SERVICE SEE OWNER'S MANUAL OR YOUR NEAREST SUBARU INDUSTRIAL ENGINE DEALER)
23		ENGINE, SUBARU 720CC EH72 (FOR SERVICE SEE OWNER'S MANUAL OR YOUR NEAREST SUBARU INDUSTRIAL ENGINE DEALER)
24	31610-00	HARNESS, CARB SAFETY RELEAY
25	36522-00	TANK, 9.25 GAL ROTOMOLDED FUEL
26	36689-00	GROMMET, TANK FITTING
27	36690-00	PLUG, TANK VENT
28	36693-00	CAP, FUEL TANK VENTED
29	36694-00	FITTING, TANK FUEL PICK-UP TUBE
30	36695-00	GAUGE, FUEL LEVEL KELCH 100
31	36696-00	GROMMET, KELCH 100 GAUGE
32	71379	HOSE, 20" FUEL LINE
33	77046-12	WELDMENT, BASE DL12720
34	77052-12	WELDMENT, ENGINE PLATE
35	77059-12	WELDMENT, SHIELD ENGINE

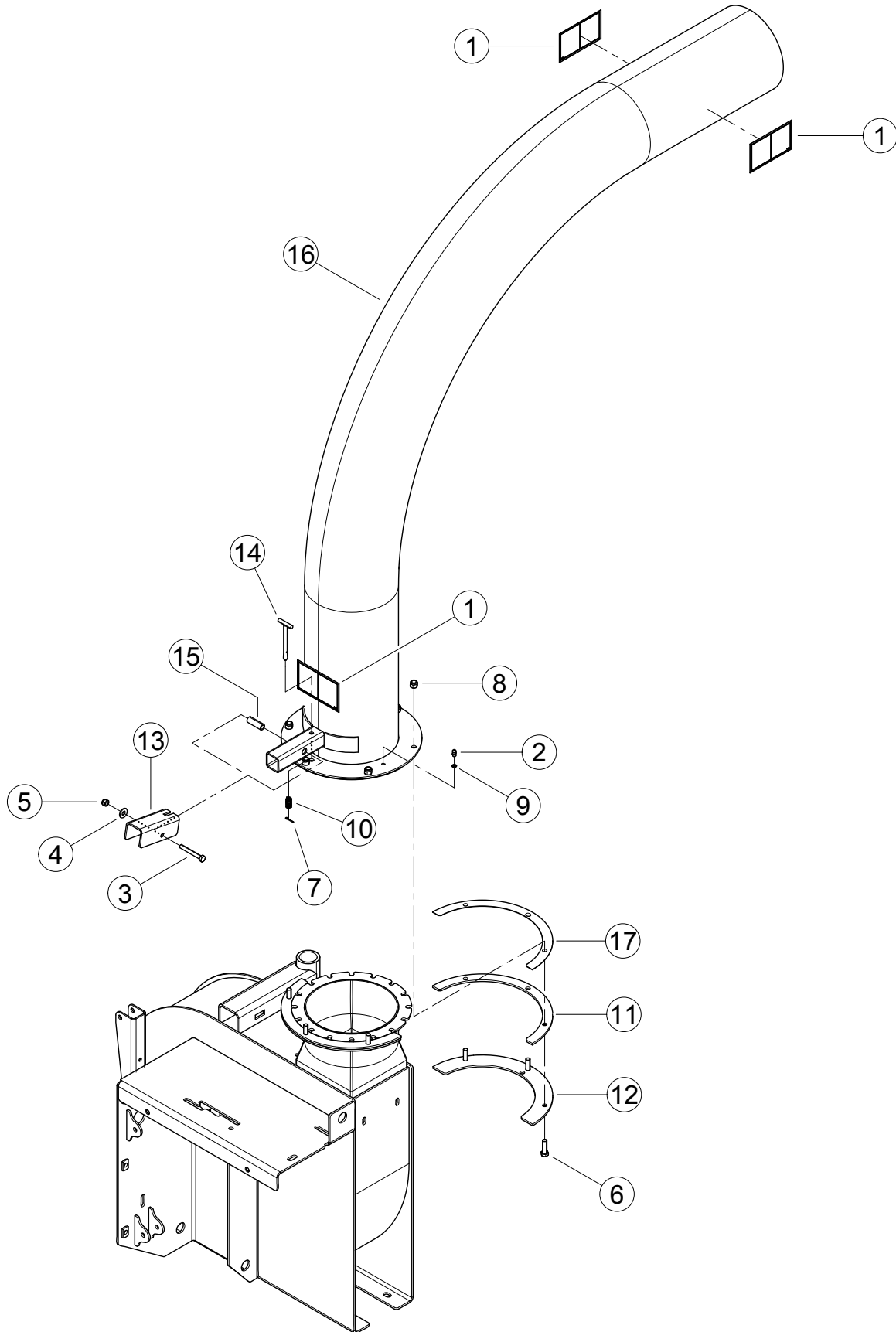


ITEM	PART NUMBER	DESCRIPTION
1	0032-0295-00	SPRING, 9 GAUGE WIRE TENSION
2	12275	FITTING, 1/4 SELF-TAP GREASE
3	12621	WASHER, UHMW SPACER .515ID-1.50OD
4	14076-00	GRIP, CLUTCH HANDLE
5	14640-00	NYLON WASHER, 1/2 INCH
6	14858-00	DECAL, ROTOR ENGAGEMENT
7	15017	BOLT, 1/2 X 4-1/2 HEX HD GR5 NC ZP
8	15034	WASHER, 1/2 FLAT ZP
9	15049	NUT, 1/2 CENTERLOCK GRB ZP
10	15092	BOLT, 1/2 X 2-1/2 HEX HD GR5 ZP
11	15153	NUT, 5/16 HEX NC - ZP
12	15174	BOLT, 1/2 X 4 HEX HD GR5 ZP
13	15205	BOLT, 3/8 X 5 HEX HD GR5 ZP
14	15250	WASHER, 5/16 FLAT ZP
15	15272	BOLT, 3/8 X 4 HEX HD GR5 NC ZP
16	15282	BOLT, 5/16 X 1-1/2 HEX HD GR5 ZP
17	15351	NUT, 5/16 SERR FLANGE NC ZP
18	15356	NUT, 5/16 NE NYLOCK ZP
19	15388	NUT, 3/8 NE NYLOCK ZP
20	15477	BOLT, 5/16 X 2 CRG GR5 NC ZP
21	16230	PULLEY, IDLER 5" X 2.50"
22	16786	ABSORBER, IDLER SHOCK
23	31324-00	BOLT, 5/16 X 3-5/8" EYE
24	70290	SPACER .75 X .90
25	73063	SPACER, .50 X .25
26	73064	SPACER, .50 X .775
27	73480-00	TUBE, PIVOT
28	75401-00	SPACER, .75 X .750
29	77087-12	WELDMENT, IDLER ARM
30	77102-12	HANDLE, ENGAGEMENT



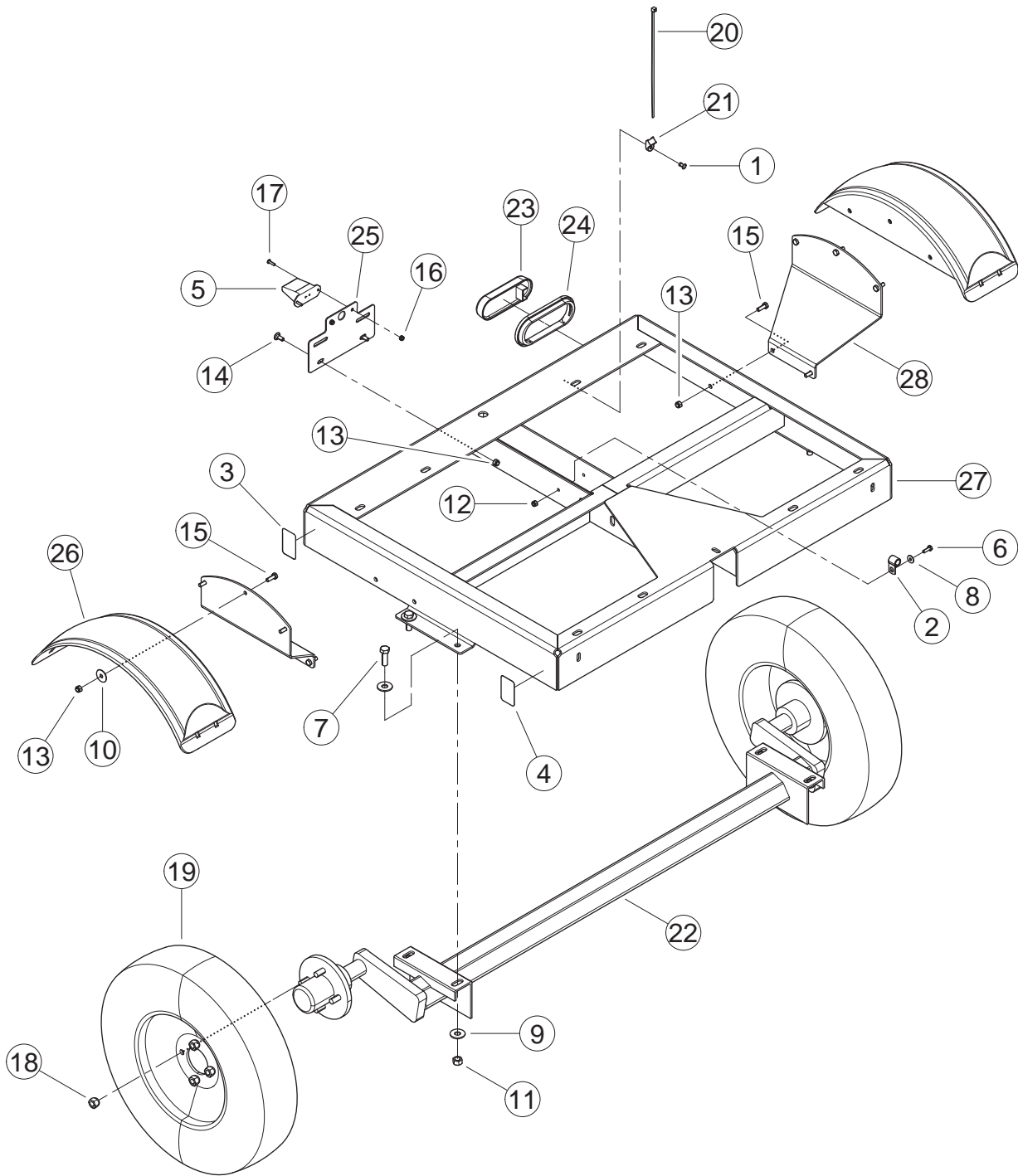
MODEL DL12720 SHOWN

ITEM	PART NUMBER	DESCRIPTION
1	12777	CLAMP, 12 IN. HOSE
2	12778	HOSE, 12 IN. X 12-1/2 FT
3	15009	BOLT, 3/8 X 3 HEX HD GR5 ZP
4	15017	BOLT, 1/2 X 4-1/2 HEX HD GR5 NC ZP
5	15031	WASHER, 3/8 FLAT ZP
6	15049	NUT, 1/2 CENTERLOCK GRB ZP
7	15092	BOLT, 1/2 X 2-1/2 HEX HD GR5 ZP
8	15103	BOLT, 5/16 X 3 HEX HD GR5 ZP
9	15219	BOLT, 5/16 X 1 HEX HD GR5 NC ZP
10	15250	WASHER, 5/16 FLAT ZP
11	15356	NUT, 5/16 NE NYLOCK ZP
12	15364	BOLT, 3/8 X 1-1/4 HEX HD GR5 ZP
13	15388	NUT, 3/8 NE NYLOCK ZP
14	15775-00	NUT, 5/8-32 JAM
15	15818-00	NUT, 5/16 FLANGE TOPLOCK
16	16502	SPRING, 7-3/4" EXTENSION
17	73139	WELDMENT, HOSE INLET
18	73142-12	WRAP, VACUUM HOSE
19	73154-12	WELDMENT, END ARM
20	73159	CHAIN, HOSE SUPPORT
21	74466-00	SPACER, TUBE 1 OD X .5 ID X 3.13
22	75677-12	WELDMENT, HOSE SUPPORT
23	75679-12	WELDMENT, HOSE SUPPORT
24	75738-12	SPACER, 5/8 OD X 11 GA X 2.13
25	76262-12	SHIELD, INTAKE
26	76622-00	ASSEMBLY, SEALED SWITCH
27	77071-00	ASSEMBLY, VACUUM INTAKE COVER, SERVICE PART (INCLUDES ITEMS 28 & 29)
28	18993-00	DECAL, INSTRUCTION ISO
29	36176-00	DECAL, INSTRUCTION ISO

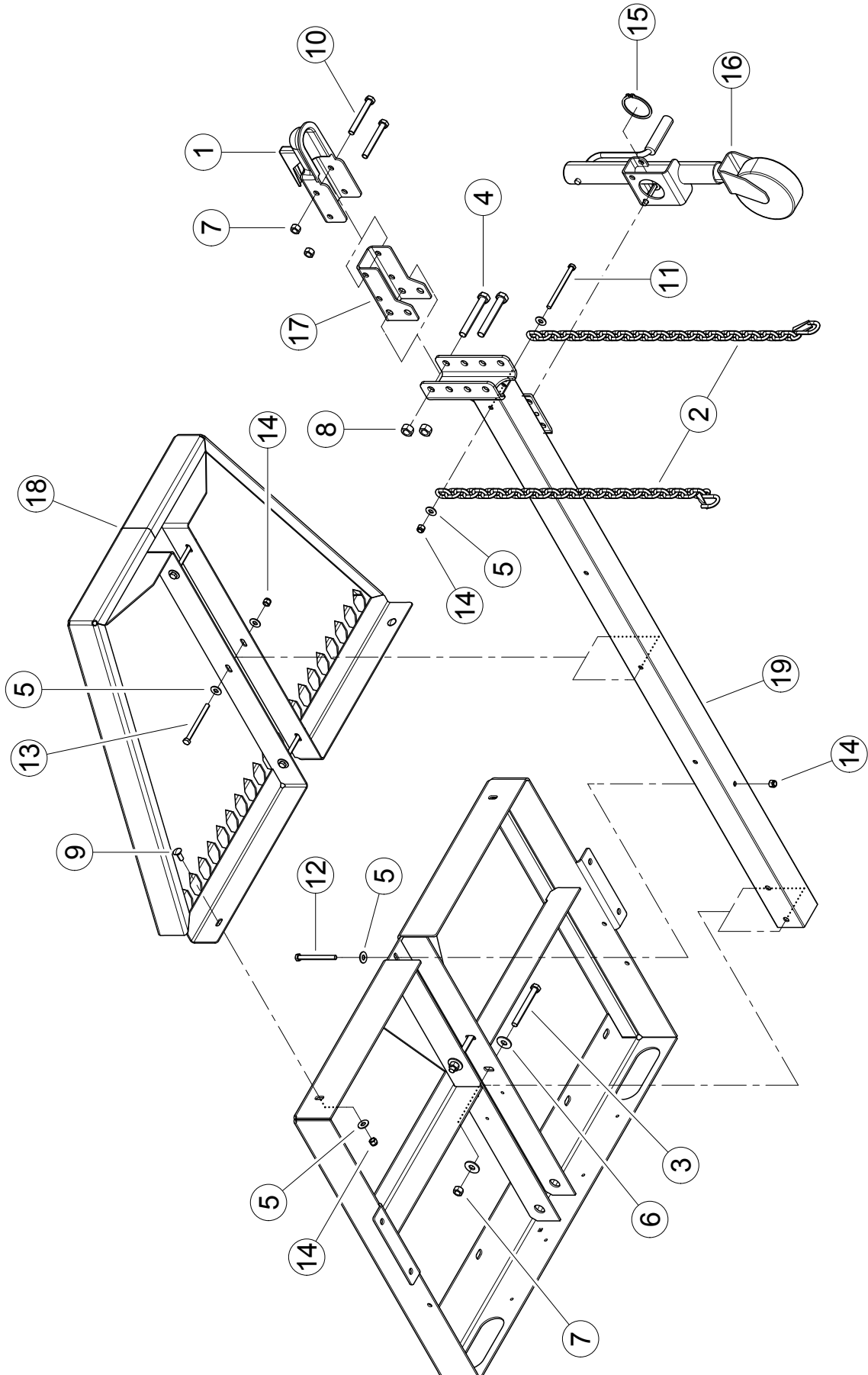


MODEL DL12720 SHOWN

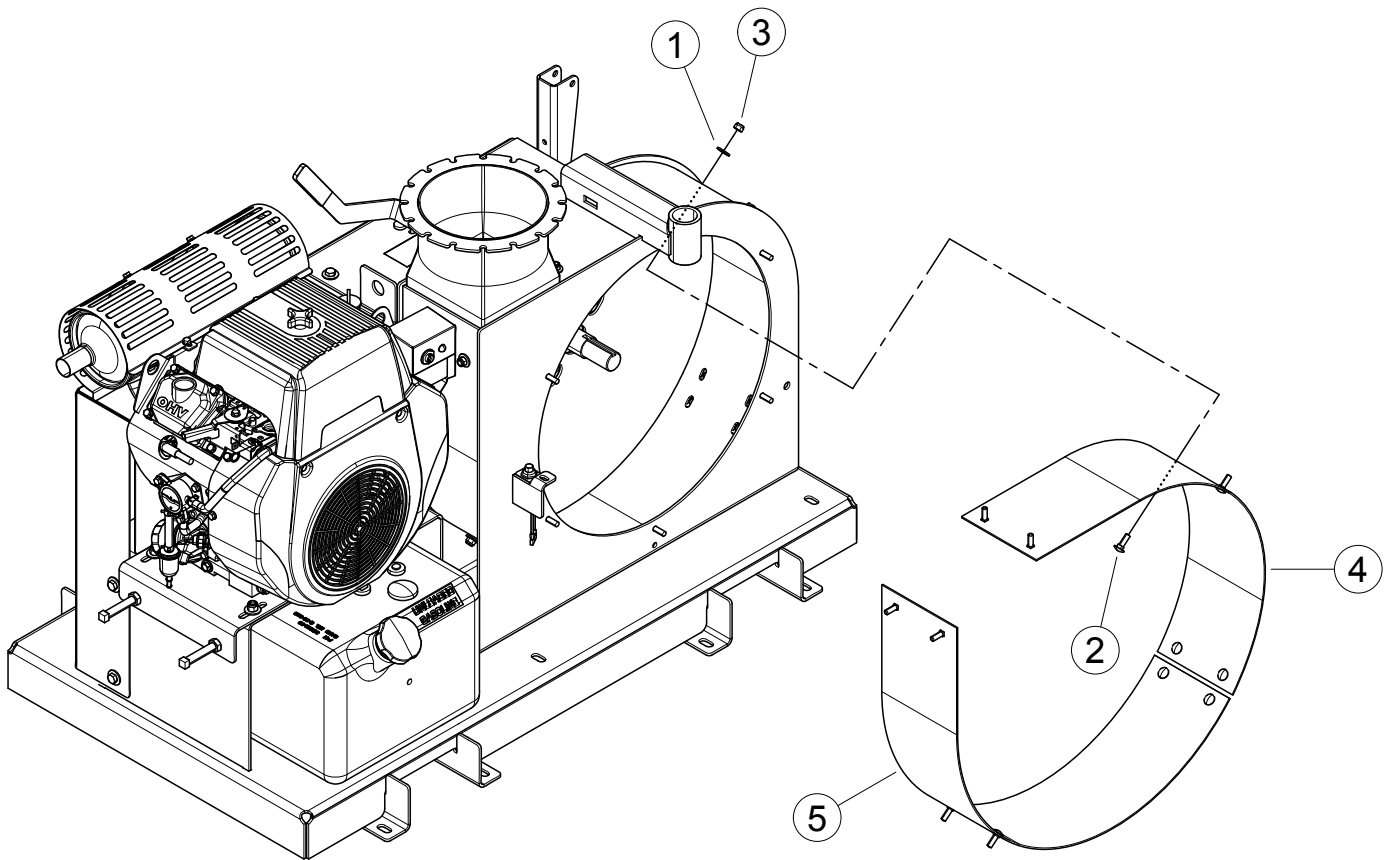
ITEM	PART NUMBER	DESCRIPTION
1	12173	DECAL, DISCHARGE ISO
2	12275	FITTING, 1/4 SELF-TAP GREASE
3	15154	BOLT, 5/16 X 2-1/2 HEX HD GR5 ZP
4	15250	WASHER, 5/16 FLAT ZP
5	15356	NUT, 5/16 NE NYLOCK ZP
6	15364	BOLT, 3/8 X 1-1/4 HEX HD GR5 ZP
7	15380	PIN, 3/32 X 3/4 COTTER
8	15388	NUT, 3/8 NE NYLOCK ZP
9	15584	WASHER, .254 X .400 X .048 FLAT
10	16556	SPRING, LOCK COMPRESSION
11	71247	RING, DISCHARGE SPACER
12	71248	RING, DISCHARGE CLAMP
13	71252	LEVER, DISCHARGE LOCK
14	71253	WELDMENT, DISCHARGE LOCK PIN
15	71256	TUBE, DISCHARGE LOCK PIVOT
16	73137-12	WELDMENT, DISCHARGE TUBE
17	74811-12	SHIM, DISCHARGE SPACER RING



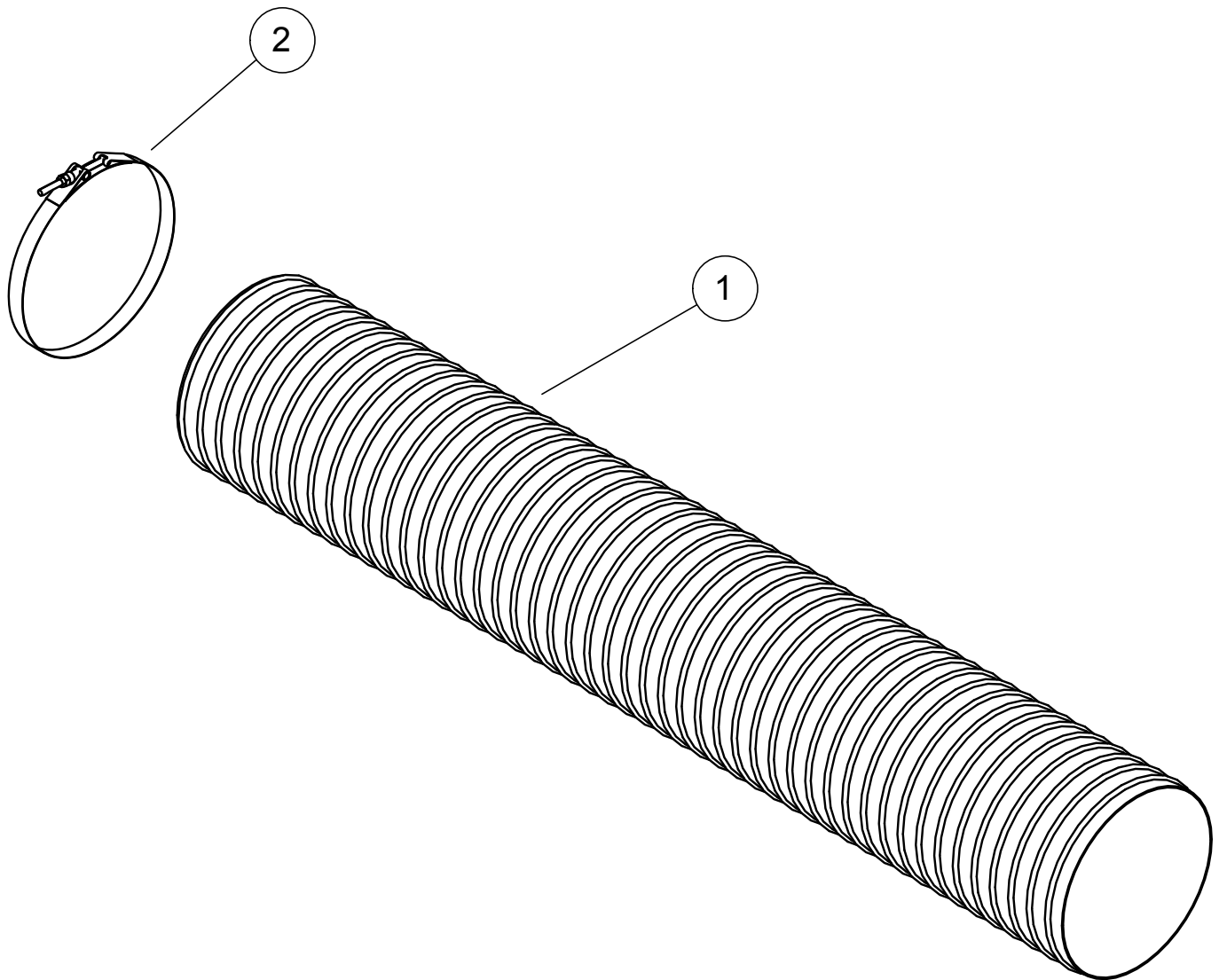
ITEM	PART NUMBER	DESCRIPTION
1	0111-0058-00	RIVET, 1/4 X 3/4 ST POP
2	14048-00	CLAMP, 9/16" COATED
3	14374-00	REFLECTOR, WIDE ANGLE RED
4	14375-00	REFLECTOR, WIDE ANGLE AMBER
5	14368-00	LIGHT, LICENSE PLATE
6	15001	BOLT, 1/4 X 3/4 HEX HD GR5 ZP
7	15014	BOLT, 1/2 X 1-1/2 HEX HD GR5 ZP
8	15030	WASHER, 1/4 FLAT ZP
9	15034	WASHER, 1/2 FLAT ZP
10	15040	WASHER, 5/16 FENDER ZP
11	15049	NUT, 1/2 CENTERLOCK GRB ZP
12	15355	NUT, 1/4 NE NYLOCK ZP
13	15356	NUT, 5/16 NE NYLOCK ZP
14	15367	BOLT, 5/16 X 3/4 CRG GR5 NC ZP
15	15396	BOLT, 5/16 X 7/8 HEX HD NC GR5 ZP
16	15397	NUT, 10/24 NYLOCK TYPE NM, ZP
17	15460	SCREW, #10-24 X 3/4 MCH. PAN HD PH ZP
18	15527	NUT, 1/2-20 WHEEL
19	16548	ASSEMBLY, 5.30-12 TIRE + SPOKE RIM
20	17320	STRAP, 11 IN. BLACK TIE
21	18549-00	CLAMP, CABLE MOUNT
22	31658-00	AXLE, 2000 LB TORSION
23	31736-00	TAIL LIGHT, OVAL LED
24	31737-00	GROMMET, OVAL TAIL LIGHT
25	75543-12	PLATE, LICENSE
26	76624-00	FENDER, BLACK PLASTIC DRILLED
27	77039-12	WELDMENT, TRAILER BASE
28	77091-12	MOUNT, FENDER
	31661-00	HARNESS, DEBRIS LOADER



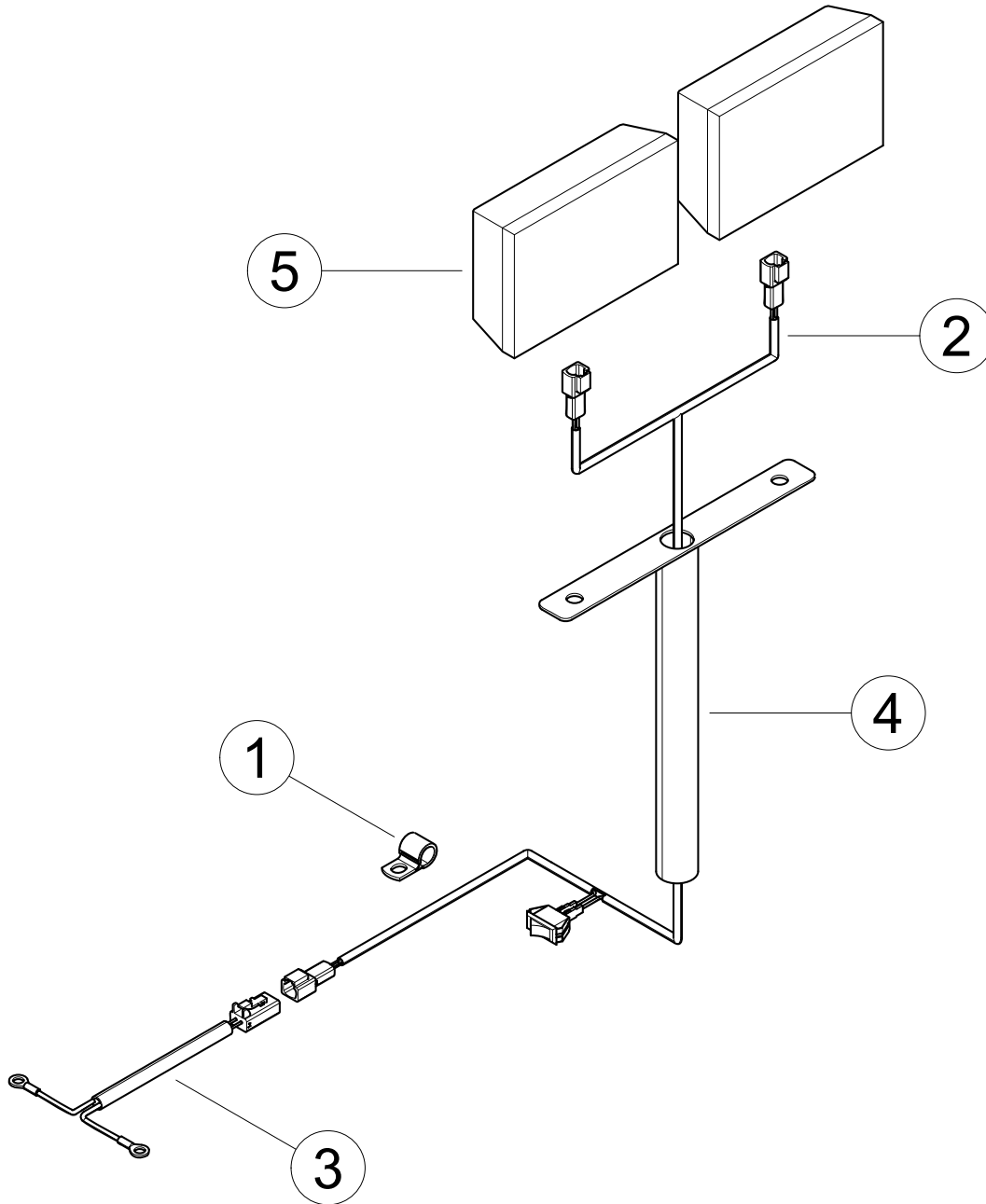
ITEM	PART NUMBER	DESCRIPTION
1	14257-00	COUPLER, 2 IN.
2	14381-00	CHAIN, SAFETY 5000 LB W/LATCH
3	15017	BOLT, 1/2 X 4-1/2 HEX HD GR5 NC ZP
4	15021	BOLT, 5/8 X 4-1/2 HEX HD GR5 ZP
5	15031	WASHER, 3/8 FLAT ZP
6	15034	WASHER, 1/2 FLAT ZP
7	15049	NUT, 1/2 CENTERLOCK GRB ZP
8	15050	NUT, 5/8 CENTERLOCK GR5 ZP
9	15057	BOLT, 3/8 X 1 CRG GR5 NC ZP
10	15174	BOLT, 1/2 X 4 HEX HD GR5 ZP
11	15205	BOLT, 3/8 X 5 HEX HD GR5 ZP
12	15272	BOLT, 3/8 X 4 HEX HD GR5 NC ZP
13	15274	BOLT, 3/8 X 4-1/2 HEX HD GR5 NC ZP
14	15388	NUT, 3/8 NE NYLOCK ZP
15	15841-00	SNAP RING, 2-1/2 EXTERNAL
16	16616	JACK, PIVOTING W SWIVEL CASTOR
17	77080-12	MOUNT, COUPLER
18	77086-12	WELDMENT, STORAGE HITCH
19	77089-12	WELDMENT, DL HITCH POLE



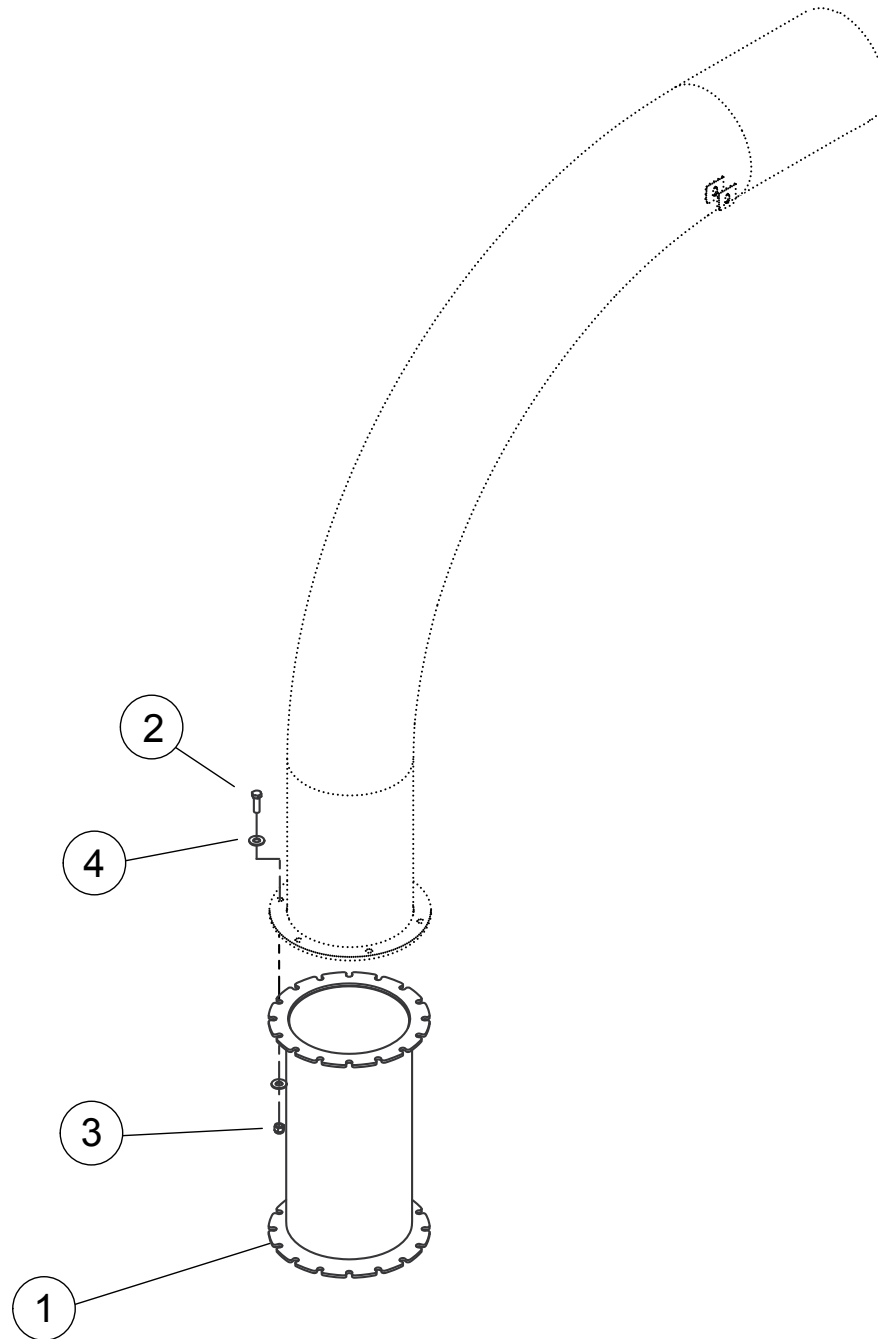
KIT, REPLACEMENT WEAR LINERS (PN 77073-00)			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	15250	WASHER, 5/16 FLAT ZP	12
2	15301	BOLT, 5/16 X 1 CRG GR5 ZP	12
3	15356	NUT, 5/16 NE NYLOCK ZP	12
4	77069-00	WRAP, HOUSING FAN	1
5	77070-00	WRAP, HOUSING FAN	1



KIT, 4' FLEX HOSE (PN 74737-00)			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	76280-00	HOSE, 8" X 4' FLEX	1
2	16091	T-BOLT CLAMP 8-1/4" (NOT SHOWN)	1



OPTION, DEBRIS LOADER LIGHTS (77105-00)			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	14048-00	CLAMP, 9/16 COATED	1
2	36063-00	HARNESS, DEUTSCH TO DEUTSCH	1
3	36073-00	HARNESS, DEUTSCH TO RING	1
4	75669-12	WELDMENT, MOUNT LIGHTS	1
5	75879-00	LAMP, 4 X 6 HALOGEN W DEUTSCH	2
	36071-00	DECAL, LIGHTS (NOT SHOWN)	1
	77104-00	INSTRUCTIONS, LIGHT KIT	1



OPTION, CHUTE EXTENSION (75888-00)			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	74731-12	WELDMENT, CHUTE EXTENSION	1
2	15364	BOLT, 3/8 X 1-1/4"HHCS GR5 ZP	6
3	15388	NUT, 3/8" NE NYLOCK ZP	6
4	15031	WASHER, 3/8" FLAT ZP	12

SERVICE PARTS & OPTIONS	
PART #	DESCRIPTION
12778	12" X 12.5' HOSE
74737-00	4' FLEXIBLE HORIZONTAL CHUTE EXTENSION
77105-00	KIT, DEBRIS LOADER LIGHTS
77073-00	KIT, LINER WEAR
75888-00	16" VERTICAL CHUTE EXTENSION
77041-00	KIT, UNIVERSAL TRAILER
77232-00	KIT, COUPLER REPLACEMENT



ECHO BEAR CAT

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E-mail: service@bearcatproducts.com • sales@bearcatproducts.com

